General

Title

Bipolar disorder: the percentage of patients diagnosed with bipolar disorder and treated with an atypical antipsychotic agent who receive at least one screening for hyperglycemia within the initial 16 weeks of treatment.

Source(s)

STABLE (STAndards for BipoLar Excellence) performance measures. Boston (MA): Center for Quality Assessment and Improvement in Mental Health; 2007. various p.

Measure Domain

Primary Measure Domain

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients diagnosed with bipolar disorder and treated with an atypical antipsychotic agent who receive at least one screening for hyperglycemia within the initial 16 weeks of treatment.

Rationale

Bipolar Disorder, Antipsychotic Medications, & Abnormalities in Glucose Regulation

In patients with bipolar disorder abnormalities in glucose regulation that relate to dysregulation in

various physiologic systems have been studied and reported.
Treatment with atypical (second generation) antipsychotic medications has been associated with weight gain and resulting impaired glucose metabolism, exacerbation of existing type 1 and type 2 diabetes, new onset of type 2 diabetes and diabetic ketoacidosis.
Case reports and controlled studies indicate that some atypical antipsychotic medications are associated with adverse effects on glucose metabolism independent of adiposity.

Monitoring of Glucose Regulation

Six sets of metabolic monitoring guidelines for persons taking antipsychotic medications are currently recognized (Mount Sinai; Australia; American Diabetes Association-American Psychiatric Association; Belgium; and United Kingdom).
All monitoring guidelines recommend the Fasting Plasma Glucose as a baseline test.
Although baseline monitoring is indicated as soon as feasible, when possible, monitoring prior to antipsychotic treatment initiation is preferable as the results may influence antipsychotic choice, especially when elevated risk factors are identified.
When fasting is not feasible to obtain (patient cooperation; cost/time), alternatives considered acceptable were the HbA1c (Mount Sinai; United Kingdom) or the Random Plasma Glucose (Mount Sinai; Australia; United Kingdom); these are not diagnostic for diabetes; however, they can be used as screening tests with follow-up if elevation is found.
Finger stick glucose testing is not recommended for screening; however, it is considered to be useful in emergency situations to rule out frank hyperglycemia/diabetic ketoacidosis.

Primary Clinical Component

Bipolar disorder; atypical antipsychotic agent; screening for hyperglycemia

Denominator Description

Patients diagnosed with bipolar disorder and treated with an atypical antipsychotic agent (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Patients who are screened for evidence of hyperglycemia within 16 weeks after initiating treatment with an atypical antipsychotic agent (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Evidence Supporting the Criterion of Quality

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

Need for the Measure

Unspecified

State of Use of the Measure

State of Use

Current routine use

Current Use

Internal quality improvement

Application of Measure in its Current Use

Care Setting

Ambulatory Care

Behavioral Health Care

Physician Group Practices/Clinics

Professionals Responsible for Health Care

Advanced Practice Nurses

Physicians

Psychologists/Non-physician Behavioral Health Clinicians

Lowest Level of Health Care Delivery Addressed

Individual Clinicians

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

Stratification by Vulnerable Populations

Unspecified

Characteristics of the Primary Clinical Component

Incidence/Prevalence

Unspecified

Association with Vulnerable Populations

Unspecified

Burden of Illness

See the "Rationale" field.

Utilization

Unspecified

Costs

Unspecified

Institute of Medicine (IOM) Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding

Users of care only

Description of Case Finding

Patients with a diagnosis involving bipolar disorder: International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) or Diagnostic and Statistical Manual of Mental Disorders, Fourth Revision, Text Revision (DSM-IV-TR): 296.0x; 296.1x; 296.4x; 296.5x; 296.6x; 296.7; 296.80-82; 296.89;

or 301.13

Denominator Sampling Frame

Patients associated with provider

Denominator Inclusions/Exclusions

Inclusions
Patients 18 years of age or older with an initial diagnosis or new episode/presentation of bipolar disorder

AND

Documentation of a diagnosis of bipolar disorder; to include at least one of the following:

- Codes 296.0x; 296.1x; 296.4x; 296.5x; 296.6x; 296.7; 296.80; 296.81; 296.82; 296.89; 301.13 documented in body of chart, such as, a pre-printed form completed by a clinician and/or codes documented in chart notes/forms
- Diagnosis or impression documented in chart indicating bipolar disorder
- Use of a screening/assessment tool for bipolar disorder with a score or conclusion that patient has bipolar disorder and indication that this information is used to establish or substantiate the diagnosis

AND

Documentation of treatment with an atypical antipsychotic agent (Refer to the "Data Dictionary Reference" in the original measure documentation for specified medications.)

Exclusions
Exclude case from denominator population if clinician requests patient to obtain screening test for hyperglycemia but then subsequently documents that the patient failed to comply with clinician request.

Relationship of Denominator to Numerator

All cases in the denominator are equally eligible to appear in the numerator

Denominator (Index) Event

Clinical Condition

Encounter

Therapeutic Intervention

Denominator Time Window

Time window is a single point in time

Numerator Inclusions/Exclusions

Inclusions
Screening for hyperglycemia must include documentation of one of the following:

- Reference in chart that test was ordered or requested and that results or information about results

was obtained
Lab results documented or filed in chart or available in patient's electronic medical record

AND

Timeframe:
Test results documented or recorded within 16 weeks after the initiation of a second generation atypical antipsychotic medication.

Exclusions
Unspecified

Measure Results Under Control of Health Care Professionals, Organizations and/or Policymakers

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

Numerator Time Window

Fixed time period

Data Source

Administrative data

Medical record

Level of Determination of Quality

Individual Case

Pre-existing Instrument Used

Metabolic Monitoring Flow Sheet: Brief documentation tool for office-based practice (available at www.cqaimh.org/stable.html)

Computation of the Measure

Scoring

Rate

Interpretation of Score

Better quality is associated with a higher score

Allowance for Patient Factors

Unspecified

Standard of Comparison

Internal time comparison

Evaluation of Measure Properties

Extent of Measure Testing

The STABLE measures were developed using the RAND Appropriateness Method and have been shown to have content validity and face validity.
Data feasibility testing was performed to determine the availability of the data elements required in the measure numerator and denominator specifications.
Inter-abstractor reliability testing was performed to assess the data collection strategy. The data collection strategy included data collection forms; data dictionary references and abstractor instructions.
A field study was conducted to determine measure conformance in an appropriate convenience sample.

Refer to the references listed below for further information.

Evidence for Reliability/Validity Testing

STABLE performance measures: data feasibility testing & results. Boston (MA): Center for Quality Assessment and Improvement in Mental Health; 2007. 2 p.

STABLE performance measures: development process & validity ratings. Boston (MA): Center for Quality Assessment and Improvement in Mental Health; 2007. 3 p.

STABLE performance measures: field study process & conformance findings. Boston (MA): Center for Quality Assessment and Improvement in Mental Health; 2007. 3 p.

STABLE performance measures: inter-abstractor reliability testing & results. Boston (MA): Center for Quality Assessment and Improvement in Mental Health; 2007. 2 p.

Identifying Information

Original Title

Bipolar disorder: screening for hyperglycemia when atypical antipsychotic agent prescribed.

Measure Collection Name

Standards for Bipolar Excellence (STABLE) Performance Measures

Submitter

Center for Quality Assessment and Improvement in Mental Health - Clinical Specialty Collaboration

Developer

STABLE Project National Coordinating Council - Clinical Specialty Collaboration

Funding Source(s)

AstraZeneca LLP, Wilmington, Delaware, provided financial sponsorship for the STABLE Project. They did not otherwise participate in the development of either the measures or toolkit.

Composition of the Group that Developed the Measure

The STABLE National Coordinating Council (NCC) was comprised of national experts in bipolar disorder, psychiatry, primary care, and performance improvement. The NCC guided and directed the STABLE Project. NCC members agreed to serve with the understanding that the STABLE Performance Measures and Resource Toolkit would be fully transparent and available without cost in the public domain.

EPI-Q, Inc., is a consulting company providing practice-based outcomes research, pharmacoeconomic studies, and quality improvement services. EPI-Q managed the STABLE Project.

Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

Endorser

National Quality Forum - None

Adaptation

Measure was not adapted from another source.

Release Date

2007 Jan

Measure Status

This is the current release of the measure.

The STABLE Project National Coordinating Council reaffirmed the currency of this measure in November 2010.

Source(s)

STABLE (STAndards for BipoLar Excellence) performance measures. Boston (MA): Center for Quality Assessment and Improvement in Mental Health; 2007. various p.

Measure Availability

The individual measure, "Bipolar Disorder: Screening for Hyperglycemia when Atypical Antipsychotic Agent Prescribed," is published in "STABLE (STAndards for BipoLar Excellence) Performance Measures." This document is available in Portable Document Format (PDF) from the Center for Quality Assessment and Improvement in Mental Health (CQAIMH) Web site .

Companion Documents

The following is available:

> STABLE National Coordinating Council Resource Toolkit Workgroup. STABLE resource toolkit. Boston (MA): Center for Quality Assessment and Improvement in Mental Health; 2007 Mar. 67 p. This document is available in Portable Document Format (PDF) from the Center for Quality Assessment and Improvement in Mental Health (CQAIMH) Web site .

NQMC Status

This NQMC summary was completed by ECRI Institute on January 10, 2008. The information was verified by the measure developer on April 14, 2008. The information was reaffirmed by the measure developer on November 1, 2010.

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